

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/047,089	01/17/2002	Toshio Inase	218233US2	5580	
	7590 08/18/2004		EXAMINER		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET			ANGEBRANNDT. MARTIN J		
ALEXANDRIA, VA 22314			ART UNIT	PAPER NUMBER	
			1756		
			DATE MAILED: 08/18/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

ļ.		Application No.	Applicant(s)					
Advisory Action		10/047,089	INASE ET AL.					
		Examiner	Art Unit					
		Martin J Angebranndt	1756					
	The MAILING DATE of this communication appears on the cover sheet with the correspondence address							
final	REPLY FILED 05 August 2004 FAILS TO PLACE Tefore, further action by the applicant is required to average tion under 37 CFR 1.113 may only be either: (1) ition for allowance; (2) a timely filed Notice of Appeal nination (RCE) in compliance with 37 CFR 1.114.	old abandonment of this applica	ition. A proper reply	y to a				
	PERIOD FOR REPLY [check either a) or b)]							
E fee ha fee un	The period for reply expires 3 months from the mailing date The period for reply expires on: (1) the mailing date of this A no event, however, will the statutory period for reply expire to ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS 706.07(f). In terminal of time may be obtained under 37 CFR 1.136(a). The verbeen filed is the date for purposes of determining the period of der 37 CFR 1.17(a) is calculated from: (1) the expiration date of the set forth in (b) above, if checked. Any reply received by the Offic filed, may reduce any earned patent term adjustment. See 37 Cl	dvisory Action, or (2) the date set forth ater than SIX MONTHS from the mailing FILED WITHIN TWO MONTHS OF TH date on which the petition under 37 CFF fextension and the corresponding amount in the shortened statutory period for reply the later than three months offer the motion of the shortened statutory period for reply the later than three months offer the motion.	or date of the final rejection E FINAL REJECTION. R 1.136(a) and the appropriate the fee. The appropriate the fee.	on. See MPEP opriate extension opriate extension				
1. A Notice of Appeal was filed on Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.								
2. The proposed amendment(s) will not be entered because:								
(a) they raise new issues that would require further consideration and/or search (see NOTE below);								
(b) ☐ they raise the issue of new matter (see Note below);								
	they are not deemed to place the application in issues for appeal; and/or	• •	ially reducing or sim	plifying the				
(d	they present additional claims without cancelin NOTE:	g a corresponding number of fir	nally rejected claims	· .				
3. Applicant's reply has overcome the following rejection(s): Claims 8 and 16 are now objected to.								
4.	Newly proposed or amended claim(s) would be canceling the non-allowable claim(s).	e allowable if submitted in a sep	parate, timely filed a	mendment				
5.⊠	The a) ☐ affidavit, b) ☐ exhibit, or c) ☒ request for r application in condition for allowance because: See	econsideration has been consid Continuation Sheet.	ered but does NOT	place the				
6.	The affidavit or exhibit will NOT be considered becaraised by the Examiner in the final rejection.		issues which were	newly				
7.🛛	For purposes of Appeal, the proposed amendment(s explanation of how the new or amended claims wou	s) a) will not be entered or b) lid be rejected is provided below	will be entered an	nd an				
The status of the claim(s) is (or will be) as follows:								
	Claim(s) allowed: <u>1-4 and 9-12</u> .							
	Claim(s) objected to: 7,8,15 and 16.							
	Claim(s) rejected: <u>5,6,13 and 14</u> .							
	Claim(s) withdrawn from consideration:							
8. 🔲	8. The drawing correction filed on is a) approved or b) disapproved by the Examiner.							
	Note the attached Information Disclosure Statement(
	Other:		- Wh					
S. Patent a	nd Trademark Office		Martin / Angebranndi Primary Examiner Art Unit: 1756	t				

U.S. Patent and Trademark Offic PTOL-303 (Rev. 11-03)

E/A/OY

Continuation of 5. does NOT place the application in condition for allowance because: The equivalence of silicon dioxide and alumi9num oxide is established in the reference. Reviewing the data in table 8, which relates to example 10 the examiner notes that increased silicon dioxide content renders the medium more sensitive (10-1 to 10-5) which is desired. The examiner notes that in these examples, the aluminum oxide content is at least 50% and the presence of silicon dioxide is clearly permitted. The examiner notes also that data exists only for carbides of Ti, Ta, Si and Nb. The examiner notes that the showing is not commesurate with the scope of coverage sought, which includes even only a small amount of aluminum oxide being present. Replacing a portion of the silicon dioxide with aluminum oxide would fall within the claims and addresses the arguments of the applicant,noting that the limiation of claim 13 is met when silicon dioxide is present. Replacing only a portion of the silicon dioxide with aluminum oxide, either the mole fraction of total oxides to carbides or the relative amounts of the silicon dioxide to carbide could be easily maintained and until aluminum oxide became the dominant component, the resultant composition would be within that required by the claims. The language "oxides, carbides, and nitrides of metals such as Si, Al, Ti, Zr, Te, Ge, etc" (7/34-35) is held to establish the equivalence of these materials, particularly when noting that they are described as possessing a high heat resistance and useful in forming protective layers. What could describe equivalence better than their physical properties, which defines related elements in the periodic table, and their utility, which is the basis for the doctrine of equivalence.

2